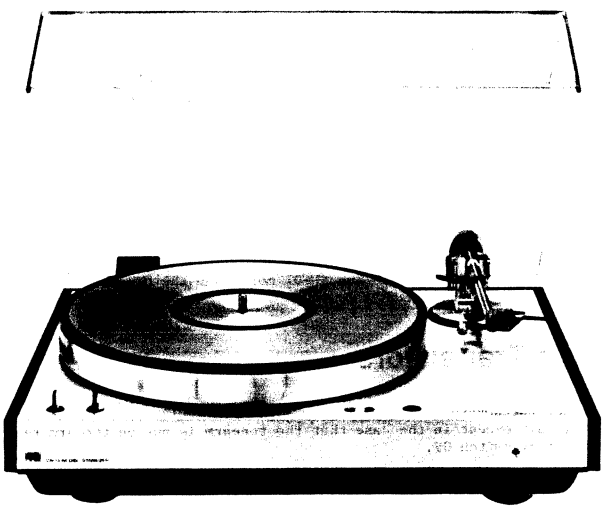
SERVICE MANUAL

VACUUM DISC STABILIZER TURNTABLE PD-370



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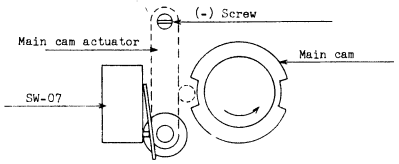
Adjustment Procedures

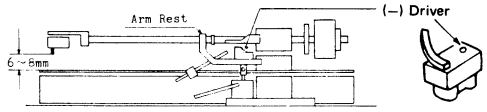
The re-alignment may be required due to the probable deviation in the measurements of the cartridge and disc employed although the complete alignment is already made at the factory side.

(1) Height adjustment of Arm-Lifter
   a. Set the disc sucked and put the unit into the playback mode.
   b. Loosen the fixing screw for arm-lifter, and adjust the height so that the clearance between the stylus tip and surface of the disc could be procured by about 6--8mm.
   Remarks: Proceed this alignment so that the tone-arm should not be hooked by the arm-rest.



Adjustment of SW-07 Main Cam SW

This alignment is needed in the "play" mode when the charge lever cannot be opened sufficiently or the lever is going to shut again causing irregular noise or preventing the platter from turning due to the touch of lever shaft to the platter.



As the pivot of the main cam actuator is eccentric, you can change the timing of the SW-07 by turning the pivot with a (-) screw driver.
Adjust the main cam actuator so that the motor can stop when the charge lever is in the at most open status by pushing the V.D.S. on switch (SW02).
However, as the pivot of main cam actuator plays the circular movement, there are two points having the same timing between the main cam and main cam actuator.
Be sure of choosing the very position which pushes the SW-07 more than the other.
After adjustment, do not forget to put glue.

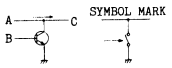
Explanation About Transistors

Q 13-1 2SC945
   This operates to cancel not the set signal to be fed to V.D.S. off FLIP-FLOP circuit but the set signal to V.D.S. on FLIP-FLOP circuit except in the case that the tonearm is put on the arm rest position by the tonearm position detecting switch 09.

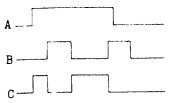
Q 13-2 2SC945
   This operate to cancel the output coming from "V.D.S. on/off" FLIP-FLOP circuit so that the V.D.S. motor should not rotate except when the tonearm is at the arm rest by the tonearm detector switch 09.
   While when the "V.D.S. off" FLIP-FLOP circuit is set on, the V.D.S. operation starts after the tonearm get back to arm rest position.
   --- This transistor is adopted so that the platter should not be mechanically locked ever if "V.D.S. on/off" button is switched on while playing.

Q 14 2SC945
   When the tonearm left from the arm rest, the output of V.D.S. on/off FLIP/FLOP circuit is cancelled by Q 13-2.
   While the tonearm is placed at the arm rest, V.D.S. operation completes, this transistor works to cancel this blocking signal until the V.D.S. operation is achived.

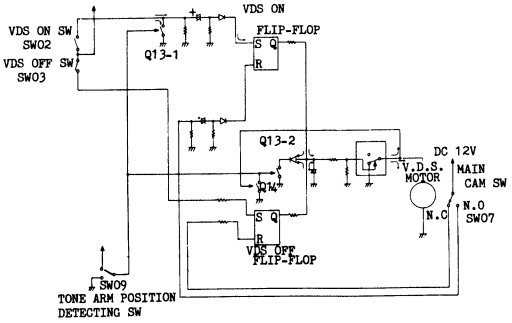
MUTING CIRCUIT (CANCEL CIRCUIT)



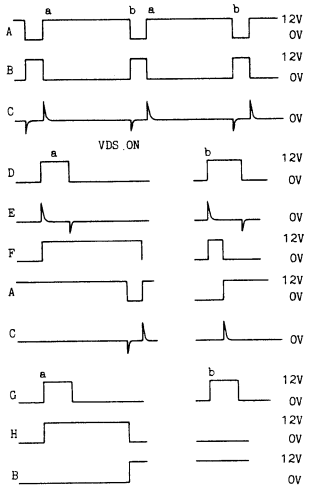
MUTING CIRCUIT TIMING CHART



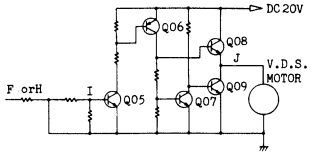
PB-1373 BLOCK DIAGRAM



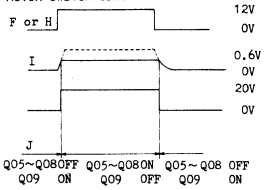
PB-1373 TIMING CHART



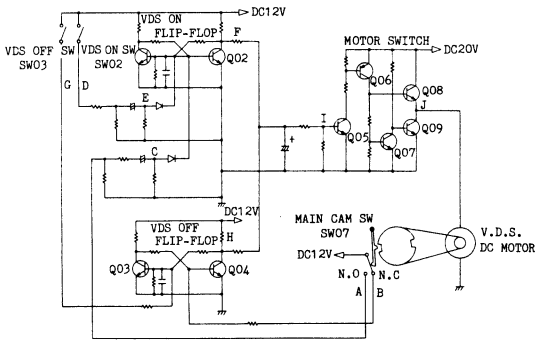
MOTOR SWITCH CIRCUIT



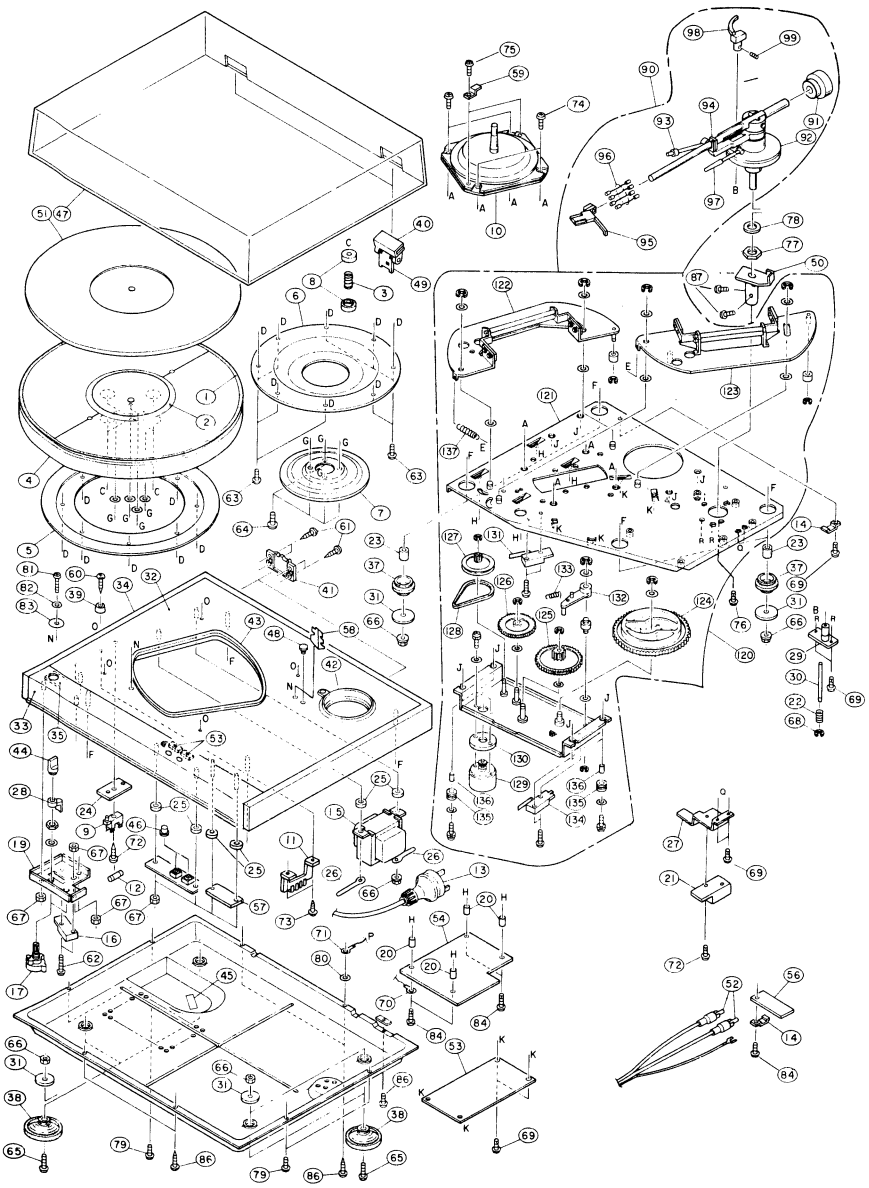
MOTOR SWITCH CIRCUIT TIMING CHART



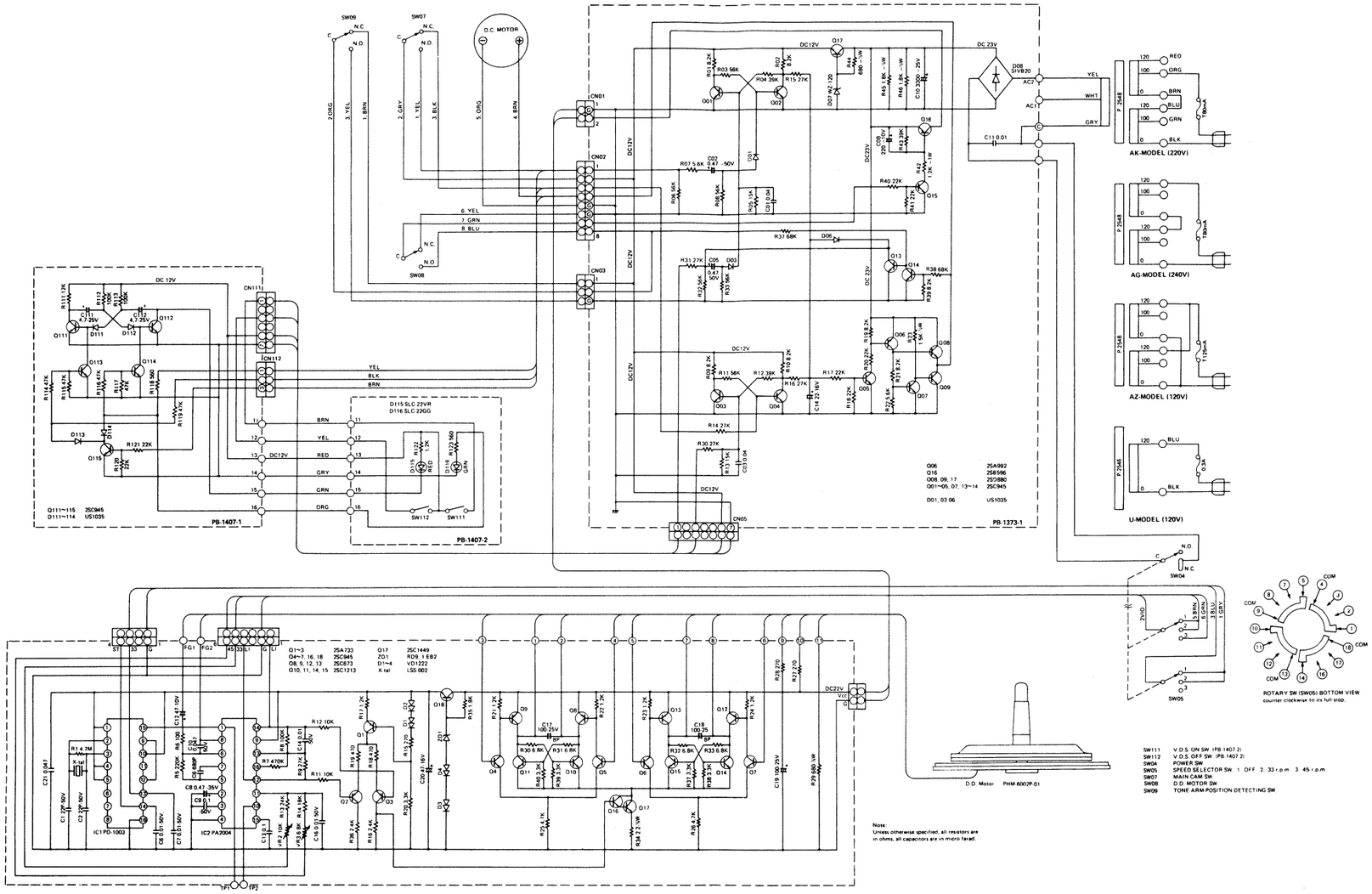
PB-1373 CIRCUIT DIAGRAM

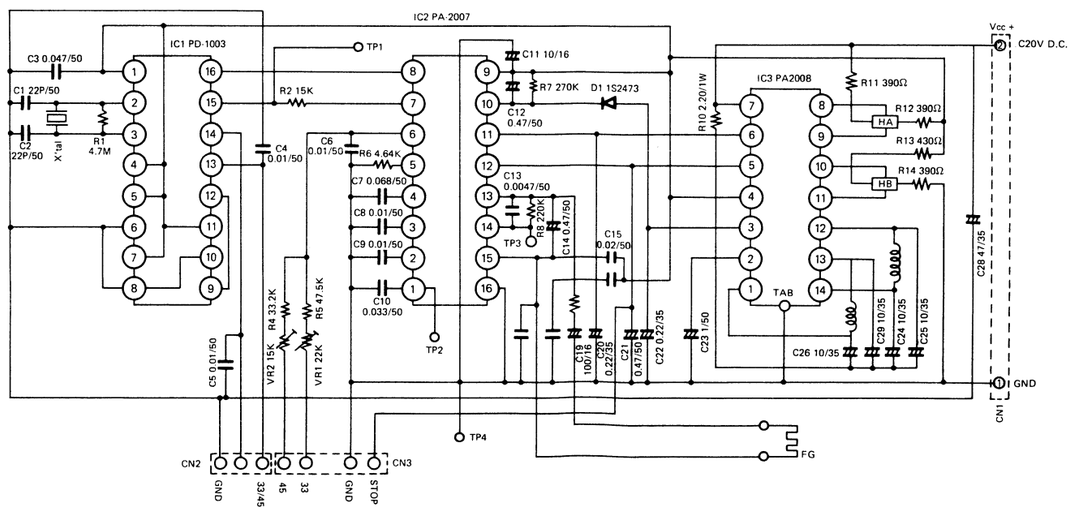


Exploded View



Schematic Diagram





PD370

Specifications

(Phono Motor Section)	
*Driving System:	Direct-Drive System
*Motor:	DC-servo brushless & slotless quartz-looked motor
*Turntable Platter:	30cm aluminiumdie-cast with built-in VDS pump(2.5 kgs)
*Rotation:	33-1/3 rpm, 45 rpm (2-speed)
*S/N Ratio:	better than 70dB(DIN B)
*Wow & Flutter:	no more than 0.03% W.R.M.S.
(Tonearm Section)	
*Tonearm:	Straight Arm of static balance type
*Effective Length:	230mm
*Tracking Error:	+2 12' 1 30'
*Overhang:	16mm
*Cartridge Weight:	5g-10g
*Cartridge Height:	16mm-19mm (by use of spacers)
*Stylus Pressure:	0-3g (direct reading)
*Accessories:	Anti-shake adjustmetn
(Additional Features)	
*Dust Cover:	Detachable with semi-freestop hinge
(General)	
*Power Consumption:	10W(CSA rated)
*Dimensions:	438 (W) x 165 (H) x 365 (D) mm (13.9" x 6.4" x 14.6")
*Weight:	Net 10.5 kgs (23.1 lbs.) Gross 12.0 kgs (26.4 lbs.)

Specifications and appearance design subject to change without notice.

Exploded View Parts List

Symbol No.	Stock No.	Description
1	UN1031-E	Sealing Pad (OUT)
2	UN1032-E	Sealing Pad (IN)
3	UU1039	Coil Spring
4	UZ1254-1	Turn TAble
5	UZ1255	Sucking Core
6	UZ1257	Sucking Plate
7	UZ1292	Roller Plate
8	WZ1154	Spring Table
9	AH0019	Fuse Holder
10	AM1008A	DC Motor PHM. 6002P-02
11	AG0109	Lug Terminal 2L5P
12	BF0216	Fuse 0.125AT (AZ)
	BF0217	Fuse 0.08AT (AK,AG)
13	BK0018	AC Cord (AZ)
	BK0022	AC Cord (AK)
	BK0023	AC Cord (AG)
14	BZ0023	Cord Clamp
15	PT2548	Power Trans.
16	SP0191	GV Switch AH4700
17	SR0158	Rotary Switch
18	UE1112	Bottom Plate
19	UR1319	Bracket
20	US5012	Stand 11mm
21	SP5069	GV Switch AH4100
22	UU1041	Lifter Spring
23	UW1138	Insulator Column
24	UW1139	Spacer
25	UW1140	Spacer
26	UZ1114	Bind Bracket
27	UR1382	Bracket
28	UZ1282	Switch Lever
29	UZ1352	Lift Bearing
30	UZ1284	Lift Shaft
31	UZ1286	Insulator Table
32	WA1231	Aluminum Panel
33	WA1257	Aluminum Panel
34	WB1103	Cabinet
35	WD1135	Escutcheon
36	UW1159	Spacer
37	WZ1148	Main Insulator
38	WZ1189	Cabinet Insulator
39	UW1137	Spacer
40	UZ1277	Hinge
41	UZ1278	Hinge Holder
42	WD1134	Escutcheon
43	WE1098	Edge Protector
44	WJ1093	Mold Knob
45	UZ1307	Insulator Sheet
46	WJ1154	Mold Knob
47	WZ1147	Dust Cover
48	WZ1158	Cap
49	WZ1178	Bushing
50	UZ5035	Switch Lever
51	WZ1160	Record Sheet 3mm
52	WZ5098	Record Sheet 1mm
52	BK0063	Arm CAble
53	WD1124	Escutcheon
54		PB1373-1
55		PB1407-2
56		PB1373-3
57		PB1407-1

Symbol No.	Stock No.	Description
58	WE1114	Protector
59	UR1341	Motor Stopper
60	YCG24C10	Wood Scr. 2.4x10 BLK
61	YCG31C10	Wood Scr. 3.1x10 BLK
62	YAA30A18	Bind Scr. 3x18
63	YAA30A04	Bind Scr. 3x4
64	YAA40C08	Bind Scr. 4x8 BLK
65	YAA40A12	Bind Scr. 4x12
66	YNK040A	Flange Nut 4PM
67	YNK030A	Flange Nut 3PM
68	YWJ026C	E Ring 2.60
69	YJB30A06	Bind Tapping 3x6
70	YZB030H	Earth Lug B-5 (AG)
71	YJB30A14	Bind Tapping 3x4
72	YCG31A13	Wood Scr. 3.1x13
73	YCG31C06	Wood Scr. 3.1x6
74	YAA40A06	Bind Scr. 4x6
75	YJC30A08	Bind Tapping 3x8
76	YJB40A10	Bind Tapping 4x10
77	YNA120A	Nut 12PM
78	YWA120A	Washer 12VP
79	UAA30C06	Bind Scr. 3x6 BLK
80	UWE040M	External Washer 40
81	YAA40A20	Bind Scr. 4x20
82	YWA040A	Washer 4PV
83	MH1004	Caution Seal
84	YAA30A06	Bind Scr. 3x6
85	YJU30C14	Sems Tapping 3x14 BLK
86	YJU30C12	Sems Tapping 3x12 BLK
87	YAA30A08	Bind Scr. 3x8
90	WZ1192	Tone Arm Ass'y
91	WZQ0018	Weight Ass'y
92	WDQ0010	Arm Base
93	WZQ0015	IFC Ass'y
94	WZQ0016	Arm Rest Clip
95	WZ1191	Head Shell
96	WZQ0018	Cartridge Wire
97	WZQ0017	Arm Lifter Lever
98	WZ1145	Lifter
99	YCD26C04	Allen Hex. Set Scr. 2.6x4
120	UZ5036	Mecha. Chassis Unit
121	UAQ0002	VDS Base Plate Ass'y
122	UOQ0013	Charge Lever Ass'y L
123	UOQ0014	Charge Lever Ass'y R
124	UOQ0010	Main Cam Gear
125	UOQ0011	Gear 3
126	UOQ0012	Gear 4
127	BXQ0002	Pulley
128	UZ00004	Belt 375
129	AMQ0103	Motor (VDS)
130	UN00001	Motor Cushion
131	SP00016	Micro Switch A
132	UZQ0105	Switch Holder
133	UU00003	Tension Spring
134	SPQ0017	Micro Switch B
135	UNQ0002	Cushion
136	UZQ0005	Column 375
137	UUQ0004	Charge Lever Spring

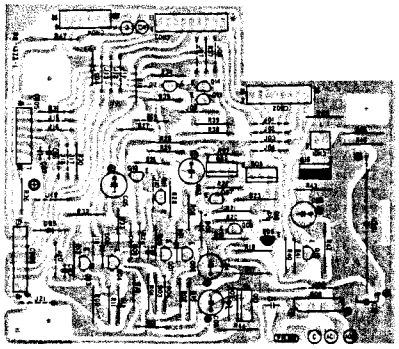
Packing Material Parts List

Symbol No.	Stock No.	Description
	ME0241	Owner's Manual
	UZ1288	Disc Pad DP-3
	WZ1159	EP Adapter
	XA1325	Packing Case
	XB1054	Styrol

Remarks:

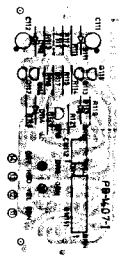
A — AK ... 220V (With Line Voltage Selector) For Europe, South East Asia.
A — AG ... 240V (With Line Voltage Selector) For England, Australia.
A — AZ ... 120V (With Line Voltage Selector) For North America, South Asia, East Asia.

PB1373-1 Parts List



Symbol No.	Stock No.	Description
(Transistor)		
Q01	TR0029	2SC945
Q02	TR0029	2SC945
Q03	TR0029	2SC945
Q04	TR0029	2SC945
Q05	TR0029	2SC945
Q06	TR0320	2SA992
Q07	TR0029	2SC945
Q08	TR5012	2SD880
Q09	TR5012	2SD880
Q13	TR0029	2SC945
Q14	TR0029	2SC945
Q15	TR0029	2SC945
Q16	TR0172	2SB596
Q17	TR5012	2SD880
(Capacitor)		
C01	CK0157	0.04uF 25WV Ce
C02	CE1749	0.48uF 50WV El
C03	OK0157	0.04uF 25WV Ce
C04	CE1718	22uF 16WV El
C05	CE1749	0.47uF 50WV El
C08	CE1712	220uF 10WV El

PB1407-2 Parts List



Symbol No.	Stock No.	Description
(Switch)		
SW111	SP0190	KHD10901 VDS on
SW112	SP0190	KHD10901 VDS off
(LED)		
D115	TD5033	SLC-22UR VDS off
D116	TD0235	SLC-22GG VDS on
(Resistor, Carbon 1/4WV)		
R122	RB0374	1.2K
R123	RB0366	560

Remarks: Capacitor; El...Electrolytic, Ce...Ceramic, My...Mylar

Symbol No.	Stock No.	Description
C09	CE1720	47uF 16WV El
C10	CE1821	3300uF 25WV El
C11	CQ1325	0.001uF 50WV My
(Diode)		
D01	TD0214	US1035
D02	TD0214	US1035
D03	TD0214	US1035
D06	TD0214	US1035
D07	TD0027	WZ-120 Zener
D08	TD0139	SIVB20 Bridge
(Resistor, Carbon)		
R01	RB0394	8.2K 1/4WV
R02	RB0394	8.2K 1/4WV
R03	RB0414	56K 1/4WV
R04	RB0410	39K 1/4WV
R05	RB0400	15K 1/4WV
R06	RB0414	56K 1/4WV
R07	RB0390	5.6K 1/4WV
R08	RB0414	56K 1/4WV
R09	RB0394	8.2K 1/4WV
R10	RB0394	8.2K 1/4WV
R11	RB0414	56K 1/4WV
R12	RB0410	39K 1/4WV
R13	RB0400	15K 1/4WV
R14	RB0406	27K 1/4WV
R15	RB0406	27K 1/4WV
R16	RB0406	27K 1/4WV
R17	RB0404	22K 1/4WV
R18	RB0404	22K 1/4WV
R19	RB0394	8.2K 1/4WV
R20	RB0404	22K 1/4WV
R21	RB0394	8.2K 1/4WV
R22	RB0390	5.6K 1/4WV
R23	RD2586	1.5K 1/2WV
R24	RB0400	15K 1/4WV
R30	RB0406	27K 1/4WV
R31	RB0406	27K 1/4WV
R33	RB0414	56K 1/4WV
R37	RB0416	68K 1/4WV
R38	RB0416	68K 1/4WV
R39	RB0394	8.2K 1/4WV
R40	RB0404	22K 1/4WV
R41	RB0404	22K 1/4WVR42
R42	RS5028	1.2K 1WV
R43	RB0410	39K 1/4WV
R44	RD2578	680 1/2WV
R45	RD2588	1.8K 1/2WV
R46	RD2588	1.8K 1/2WV

PB1407-1 Parts List

Symbol No.	Stock No.	Description
(Transistor)		
Q111	TR0029	2SC945
Q112	TR0029	2SC945
Q113	TR0029	2SC945
Q114	TR0029	2SC945
Q115	TR0029	2SC945
(Diode)		
D111	TD0214	US1035
D112	TD0214	US1035
D113	TD0214	US1035
D114	TD0214	US1035
(Capacitor, Electrolytic)		
C111	CE1727	4.7uF 25WV
C112	CE1727	4.7uF 25WV
(Resistor, Carbon 1/4WV)		
R111	RB0374	1.2K
R112	RB0420	100K
R113	RB0420	100K
R114	RB0412	47K
R115	RB0412	47K
R116	RB0412	47K
R117	RB0412	47K
R118	RB0366	560
R119	RB9412	47K
R120	RB0404	22K
R121	RB0440	22K